

INTERNATIONAL SEARCH REPORT

PCT/GB 03/05389

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K39/39 A61K39/44 A61K39/02 A61K39/12 A61K39/005
A61K39/015 A61P31/00 //C07K16/28

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, MEDLINE, WPI Data, EMBASE, PAJ, LIFESCIENCES

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/098184 A1 (HEATH ANDREW WILLIAM) 25 July 2002 (2002-07-25) paragraphs '0008!', '0027!', '0030!', '0073!	1-7, 30-34,50
X	US 2002/086026 A1 (HEATH ANDREW WILLIAM) 4 July 2002 (2002-07-04) paragraphs '0027!', '0035!', '0052!', '0087!', '0096! -/-	1-7, 10-12, 14-34,50

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents:

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *Z* document member of the same patent family

Date of the actual completion of the international search

26 March 2004

Date of mailing of the international search report

08/04/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	CARLRING JENNIFER ET AL: "Ant1-CD28 has a potent adjuvant effect on the antibody response to soluble antigens mediated through CTLA-4 by-pass." EUROPEAN JOURNAL OF IMMUNOLOGY, vol. 33, no. 1, January 2003 (2003-01), pages 135-142, XP002274855 ISSN: 0014-2980 (ISSN print) page 136 -page 137	1-50
P,X	BARR TOM A ET AL: "A potent adjuvant effect of CD40 antibody attached to antigen." IMMUNOLOGY, vol. 109, no. 1, May 2003 (2003-05), pages 87-92, XP002274856 ISSN: 0019-2805 page 91	1-50
A	WO 01 26608 A (HAYDEN LEDBETTER MARTHA S ;LEDBETTER JEFFREY A (US)) 19 April 2001 (2001-04-19) the whole document	1-50
A	XIANG R ET AL: "A dual-function DNA vaccine encoding carcinoembryonic antigen and CD40 ligand trimer induces T cell-mediated protective immunity against colon cancer in carcinoembryonic antigen-transgenic mice" JOURNAL OF IMMUNOLOGY, THE WILLIAMS AND WILKINS CO. BALTIMORE, US, vol. 167, no. 8, 15 October 2001 (2001-10-15), pages 4560-4565, XP002247590 ISSN: 0022-1767 the whole document	1-50
A	FANSLOW W C ET AL: "Structural characteristics of CD40 ligand that determine biological function" SEMINARS IN IMMUNOLOGY, W.B. SAUNDERS COMPANY, PA, US, vol. 6, no. 5, October 1994 (1994-10), pages 267-278, XP002264604 ISSN: 1044-5323 the whole document	1-40

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

Although claims 30-33 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2002098184	A1	25-07-2002	AU 2303197 A	07-11-1997
			EP 0909179 A2	21-04-1999
			WO 9738711 A2	23-10-1997
US 2002086026	A1	04-07-2002	US 2002136722 A1	26-09-2002
WO 0126608	A	19-04-2001	AU 1084901 A	23-04-2001
			EP 1246643 A2	09-10-2002
			WO 0126608 A2	19-04-2001